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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,704	07/31/2001	Kaare Tais Christensen	1076.40413X00	9898

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EXAMINER

NGUYEN, LINH V

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,704

Applicant(s)

CHRISTENSEN, KAARE TAIS

Examiner

Linh V. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Response to Arguments

This office action is in response to applicant's argument received on 3/13/03. With respect to independent claims 1, 10, 15, and 17 – 18, applicant's argued that Bailey reference does not disclose or suggest anything related to an oscillator or configuring a filter as an oscillator. Examiner respectfully traverses from the following reasons:

According to the specification on page 5, line 21 to line 24, applicant describes configuring the filter as an oscillator by a tuning control signal is to isolate the input signal through a isolator and activate the compensation circuit. Fig. 1, Bailey teaches a self tuning filter system comprising self-tuning feature is activate by disables information signal source (14) by a selection signal for MUX (12) and activate self-tuning circuit (18) (See Col. 2 lines 20 – 25, and Co. 3 lines 11 - 36). Even though Bailey does not explicitly does not disclose anything related to an oscillator or configuring a filter as an oscillator, but the system of Bailey teaches a filter comprising;configure the filter in a self-tuning mode, wherein self-tuning mode filter having the same process or steps to configuring a filter as a oscillator which have described by applicant's specification indicated above. Therefore self-tuning mode of Bailey's filter equivalent to oscillator mode of applicant's claimed invention.

As discussed above, Bailey discloses every aspect of a claims 1, 10, 15, and 17, therefore the same reference from prior office action is applying for this office action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, 5, 6, 7, 8, 10, 11, and 15 – 21, are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. U.S. patent No. 5,281,931.

Regarding to claims 1, 2, 3, 5, 6, 7, and 8, Fig. 3 Bailey et al. disclose a method and apparatus for a tuning filter (20), the filter being associated with a center frequency (Col. 2 line 16), comprising the steps of: configuring the filter as an oscillator (Col. 2 lines 20 – 24)); tuning the oscillator to a desired frequency (Col. 2 lines 46 – 55); and reconfiguring the oscillator to operate as the filter with the desired frequency as the center frequency (Col. 5 lines 51 - 56) wherein:

- step of configuring the filter as an oscillator comprises compensating for losses in the filter (Col. 3 lines 55 - 57).

- wherein the filter comprises a band pass filter (Col. 1 line 51)

- step of tuning the oscillator comprises providing a tuning signal (out put signal of 22), and further comprising a step of recording the tuning signal by storing the signal in a register which causes the oscillator to operate at the desired frequency (Col. 5 lines 25 – 44).

4. Regarding to claims 10, 11, 15 - 21, Bailey et al. as applied to claims 1, 2, 3, 5, 6, 7, and 8, above disclose every aspect of applicant's claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al.

Bailey et al. as applied to claim 1 above, disclose every aspect of applicant claimed invention. However Bailey et al. do not disclose expressly the filter 20 of Fig. 3 comprises a notch filter.

At the time the invention was made, it would have been to a person of ordinary skill in the art to modify to the bandpass filter of Bailey et al. with the notch filter because the notch filter or bandpass filter is a conventional and well-known art. Applicant has not disclosed that notch filter provides an advantage over bandpass filter, and is used for a particular purpose, or solves a state problem. One ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with bandpass filter of Bailey et al. as had indicated in applicant specification and claimed invention 3, also

the main objection of the present invention is the method for tuning the filter instead of what type of filter.

Therefore, it would have been obvious to one of ordinary skill in the art to utilizing the notch filter, instead of bandpass filter of Bailey et al. to obtain specific designed choice of filter.

7. Claims 9, 12, 13, and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al., and further in view of Kobayashi U.S. patent No. 5,550,520.

8. Bailey et al. as applied to claim 1, 10, above disclose every aspect of applicant's claim invention, however Bailey et al. does not explicitly disclose wherein the band pass filter includes a tank circuit and the step of tuning the oscillator comprises a varactor for tuning the resonant frequency of the tank and provide a negative resistance of compensate for parasitic resistance

Fig. 3 Kobayashi disclose a tunable bandpass filter by oscillation includes a tank circuit and the step of tuning the oscillator comprises a varactor for tuning the resonant frequency of the tank and provide a negative resistance of compensate for parasitic resistance (Fig. 1, and Fig. 2)

Bailey et al. and Kobayashi are analogous, because they are from similar problem solving of tunable filter, therefore it would be obvious to one having ordinary skill in the art at the time the invention was made to apply bandpass filter of Kobayashi to the basspand filter of Bailey et al. for the purpose of providing, compensate for resistive losses teaches by Kobayashi (Col. 1 lines 61 – 65)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (703) 305-1934. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Tokar can be reached at (703) 305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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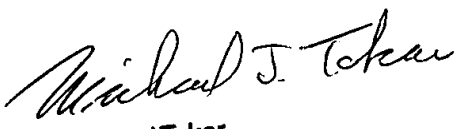
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308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LVN

May 2, 2003


Michael Tokar
Supervisory Patent Examiner
Technology Center 2800